

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-3, 6-28, 32 and 36-41 are pending in this application. Claims 1, 2, 8-15, 18-28, 32 and 36-41 are amended; and Claims 4, 5, 29-31, 33-35 and 42 are canceled by the present amendment without prejudice or disclaimer. Applicants respectfully submit that the claim amendments find support in the specification as originally filed, at least at Figure 1. Thus, no new matter is added.

In the outstanding Office Action, Claims 1-42 were rejected under 35 U.S.C. § 101; Claims 1-3, 5-7, 11-13, 15-27, 36-39, 41 and 42 were rejected under 35 U.S.C. § 102(b) as anticipated by Taro (European Patent No. 1189372);¹ and Claims 4, 8-10, 14, 28-35 and 40 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Taro.

Applicants respectfully traverse the rejection of Claims 1-42 under 35 U.S.C. § 101 as directed to nonstatutory matter.

As stated in a memorandum from John Love, Deputy Commissioner for Patent Examination Policy, dated May 15, 2008, it is the position of the USPTO that a statutory section 101 process must be (1) tied to another statutory class, or transform underlying subject matter to a different state or thing. The memorandum goes on to state “to qualify as a section 101 statutory process, the claims should positively recite the other statutory class (the thing or product) to which it is tied, for example, by identifying the apparatus that accomplishes the method steps.”

Accordingly, the method steps of the presently claimed invention are amended to be tied to structure in such a manner that the claims identify the device that performs the steps. Thus, in accordance with the clarification of “process” under 37 C.F.R. § 101 from John

¹ The outstanding Office Action cites to Taro (EP 1189362) on page 3, line 19. However, Applicants believe the Office was actually referring to Taro (EP 1189372), and thus will proceed under this assumption.

Love, Deputy Commissioner for Patent Examination Policy, method Claims 1-26, computer readable medium Claims 28 and 32, and apparatus Claims 36-41 are directed toward a statutory process.

Moreover, Claims 1-26 and 36-41 are directed toward a practical application, and do not fall within a judicial exception (law of nature, natural phenomenon, or abstract idea).

Claim 1 is not a disembodied mathematical concept which may be characterized as an “abstract idea” but rather is tied to a machine to produce a useful, concrete, and tangible result (i.e., altering and generating).² The result of method Claim 1 is to allow audible watermarking of an audio signal by substituting (or combining) some or all spectral bands with equivalent bands from a similarly encoded watermark signal to be performed without decoding either signal back to the time domain (audio sample) data. This alternation is useful, as explained in the specification, for non-limiting examples of the present invention, because in addition to protection of property rights, the method advantageously reduces the likelihood that the audio signal could become degraded by successive encoding/decoding operations carried out in a lossy system. Furthermore, the method of Claim 1 outputs a concrete result as the results of the altering step are stored in a memory. Thus, Claim 1 utilizes real world components to produce useful, concrete and tangible results in accordance with 35 U.S.C. § 101. Additionally, the method of independent Claims 22 and 26 recite similar steps.

Furthermore, Claims 36-41 describe an apparatus that provides a useful, concrete, and tangible result for at least the reasons stated for Claims 1, 22 and 26.

Furthermore, Claims 28 and 32 describe a computer readable storage medium similar to Claims 1 and 22. Thus, Claims 28 and 32 provide a useful, tangible and concrete result for at least the reasons stated for Claims 1 and 22.

² See *Eurhythmia Research Tech., Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1058-59 (Fed. Cir. 1992) holding patentable a method for analyzing electrocardiograph signals for the detection of a specific heart condition that used “electronic equipment programmed to perform mathematical computation.”

Accordingly, Applicants respectfully request the rejection of Claims 1-42 under 35 U.S.C. § 101 be withdrawn.

Applicants respectfully traverse the rejection of Claims 1-3, 5-7, 11-13, 15-27, 36-39, 41 and 42 under 35 U.S.C. § 102(b) as anticipated by Taro. Independent Claims 1, 22, 26, 36, and 38 are amended to include the subject matter of Claim 4. As conceded by the outstanding Office Action, Taro does not teach the subject matter of Claim 4.³ Therefore, the rejection of Claims 1, 22, 26, 36, and 38 and all claims dependent therefrom under 35 U.S.C. § 102(b) as anticipated by Taro is believed to be overcome.

Applicants respectfully traverse the rejection of Claims 4, 8-10, 14, 28-35 and 40 under 35 U.S.C. § 103(a) as unpatentable over Taro with respect to amended independent Claim 1.

Amended Claim 1 is directed to a method of processing a spectrally-encoded digital audio signal that includes, in part, “combining or replacing one or more of said band data components with corresponding band data components from a spectrally-encoded digital audio watermark signal.”

Turning to the applied reference, Taro describes an audio distribution system and method for protecting audio contents using a watermark technique in which it is possible to control sound quality per frequency band.⁴ The outstanding Office Action cited embodiment two of Taro as describing “replacing one or more of said band data components by corresponding band data components from a spectrally-encoded digital audio watermark signal” as recited in amended Claim 1.⁵

However, Applicants respectfully submit that the features of amended Claim 1 provide several advantages not taught by the method described in Taro. Specifically, the band data components of the encoded audio signal are altered by combining or replacing one

³ See the outstanding Office Action, page 12, lines 16-17.

⁴ See Taro, paragraphs [0001]-[0002].

⁵ See the outstanding Office Action, page 12, lines 12-15.

or more of the band data components **with corresponding band data components** of a spectrally-encoded audio watermark signal. For example, both the audio signal and the watermark signal could be compressed MP3 audio signals. To this end, band components of the MP3 watermark signal are used to replace or modify corresponding components of the audio signal.

Conversely, the method described in Taro does not utilize corresponding components of already compressed digital audio signals, and instead relies on a complicated technique in which multiple signals must be added to achieve a result. For example, Taro must generate new signals such as: antiphase analogue signals to cancel out the applied noise,⁶ potentially inaudible key data,⁷ potentially inaudible watermark,⁸ audible noise or announcement,⁹ and music ID information.¹⁰ As such, Applicants respectfully submit that independent Claim 1 patentably defines over Taro.

Although different in scope or statutory class, amended independent Claims 22, 26, 36, and 38 and claims depending therefrom, also patentably define over Taro at least for the reasons discussed above for Claim 1.

Accordingly, Applicants respectfully request the rejection of Claims 4, 8-10, 14, 28-35, and 40 under 35 U.S.C. § 103(a) be withdrawn.

Thus, it is respectfully submitted that independent Claims 1, 22, 26, 36, and 38 and claims depending therefrom are allowable.

⁶ See Taro, column 8, lines 36-43 and column 10, lines 55-59.

⁷ See Taro, column 13, lines 11-13 and 17-19.

⁸ See Taro, column 15, lines 30-32.

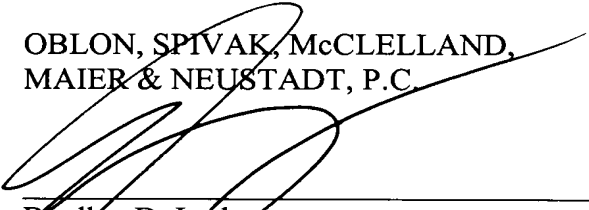
⁹ See Taro, column 17, lines 23-26.

¹⁰ See Taro, column 19, lines 10-18 and column 20, lines 5-14.

Consequently, in light of the above discussion and in view of the present amendment this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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